

PPPPPPPPPPPPP RRRRRRRRRRRR TTTTTTTTTTTTTTT SSSSSSSSSSS MMM MMM BBBBBBBBBBBBBB
PPPPPPPPPPPPP RRRRRRRRRRRR TTTTTTTTTTTTTTT SSSSSSSSSSS MMM MMM BBBBBBBBBBBBBB
PPPPPPPPPPPPP RRRRRRRRRRRR TTTTTTTTTTTTTTT SSSSSSSSSSS MMM MMM BBBBBBBBBBBBBB
PPP PPP RRR RRR TTT SSS MBBBBBBB MBBBBBBB BBB BBBB
PPP PPP RRR RRR TTT SSS MBBBBBBB MBBBBBBB BBB BBBB
PPP PPP RRR RRR TTT SSS MBBBBBBB MBBBBBBB BBB BBBB
PPP PPP RRR RRR TTT SSS MBBBBBBB MBBBBBBB BBB BBBB
PPP PPP RRR RRR TTT SSS MBBBBBBB MBBBBBBB BBB BBBB
PPP PPP RRR RRR TTT SSS MBBBBBBB MBBBBBBB BBB BBBB
PPP PPP RRR RRR TTT SSS MBBBBBBB MBBBBBBB BBB BBBB
PPPPPPPPPPPPP RRRRRRRRRRRR TTT SSSSSSSSS MMM MMM BBBBBB6BBBBBBB
PPPPPPPPPPPPP RRRRRRRRRRRR TTT SSSSSSSSS MMM MMM BBBBBBBBBBBBBB
PPPPPPPPPPPPP RRRRRRRRRRRR TTT SSSSSSSSS MMM MMM BBBBBBBBBBBBBB
PPP RRR RRR TTT SSS MMM MMM BBB BBBB
PPP RRR RRR TTT SSS MMM MMM BBB BBBB
PPP RRR RRR TTT SSS MMM MMM BBB BBBB
PPP RRR RRR TTT SSS MMM MMM BBB BBBB
PPP RRR RRR TTT SSS MMM MMM BBB BBBB
PPP RRR RRR TTT SSS MMM MMM BBB BBBB
PPP RRR RRR TTT SSS MMM MMM BBB BBBB
PPP RRR RRR TTT SSSSSSSSSSS MMM MMM BBBBBBBBBBBBBB
PPP RRR RRR TTT SSSSSSSSSSS MMM MMM BBBBBBBBBBBBBB
PPP RRR RRR TTT SSSSSSSSSSS MMM MMM BBBBBBBBBBBBBB

FILEID**TRANSFER

TTTTTTTTT1 RRRRRRRR AAAAAA NN NN SSSSSSSS FFFFFFFF EEEEEEEE RRRRRRRR
TTTTTTTTT2 RRRRRRRR AAAAAA NN NN SSSSSSSS FFFFFFFF EEEEEEEE RRRRRRRR
TT RR RR AA AA NN NN SS FF EE RR RR
TT RR RR AA AA NN NN SS FF EE RR RR
TT RR RR AA AA NN NNNN NN SS FF EE RR RR
TT RR RR AA AA NN NNNN NN SS FF EE RR RR
TT RR RR AA AA NN NN NN SSSSSS FFFFFFFF EEEEEEEE RRRRRRRR
TT RR RR AA AA NN NN NN SSSSSS FFFFFFFF EEEEEEEE RRRRRRRR
TT RR RR AAAAAAAA NN NNNN SS FF EE RR RR
TT RR RR AAAAAAAA NN NNNN SS FF EE RR RR
TT RR RR AA AA NN NN NN SS FF EE RR RR
TT RR RR AA AA NN NN NN SS FF EE RR RR
TT RR RR AA AA NN NN SSSSSSSS FF EEEEEEEE RR RR
TT RR RR AA AA NN NN SSSSSSSS FF EEEEEEEE RR RR
....
....

LL II IIII SSSSSSSS
LL II IIII SSSSSSSS
LL II SS
LLLLLLLLLL II IIII SSSSSSSS
LLLLLLLLLL II IIII SSSSSSSS

0000 1 .TITLE TRANSFER, Transfer vectors for Symiont Services Roucines
0000 2 .IDENT 'V04-000'
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0000 4 :*****
0000 5 :
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0000 23 :
0000 24 :
0000 25 :*****
0000 26 :
0000 27 :++
0000 28 :FACILITY:
0000 29 :
0000 30 : Symbiont Services Facility
0000 31 :
0000 32 :ABSTRACT:
0000 33 :
0000 34 : This module provides universal transfer vectors for the
0000 35 : shareable symbiont services.
0000 36 :
0000 37 :ENVIRONMENT:
0000 38 :
0000 39 : Native mode, user mode
0000 40 :
0000 41 :AUTHOR:
0000 42 :
0000 43 : Greg Robert 27-Apr-1983
0000 44 :
0000 45 :MODIFIED BY:
0000 46 :
0000 47 : V03-010 GRR0010 Gregory R. Robert 16-May-1984
0000 48 : Move hangup flag from task_flags to stream_flags
0000 49 :
0000 50 : V03-009 GRR0009 Gregory R. Robert 29-Sep-1983
0000 51 : Changed library module name from smbdef to prtsmbdef.
0000 52 :
0000 53 : V03-008 GRR0007 Gregory R. Robert 27-Sep-1983
0000 54 : Alter PSECT attributes so that transfer image section
0000 55 : is at front of image.
0000 56 :
0000 57 : V3B-007 GRR3007 Gregory R. Robert 23-Aug-1983

0000 58 : Bugfixes, page_setup_modules, form_setup_modules,
0000 59 : sheet_feed, symbiont initiated pause_task and stop_stream,
0000 60 : hangup code, read and write item services
0000 61 :
0000 62 : V3B-006 GRR3006 Gregory R. Robert 03-Aug-1983
0000 63 : Charged HANGUP_AST to PSM\$HANGUP_AST
0000 64 :
0000 65 : V3B-005 GRR3005 Gregory R. Robert 29-Jul-1983
0000 66 : Added FT1 transfer entries.
0000 67 :
0000 68 : V3B-004 GRR3004 Gregory R. Robert 27-Jun-1983
0000 69 : Added HANGUP routine transfer table
0000 70 :
0000 71 : V3B-003 GRR3003 Gregory R. Robert 27-May-1983
0000 72 : Removed obsolete transfers, added SEND_RESPONSE.
0000 73 :
0000 74 : V3B-002 GRR3002 Gregory R. Robert 27-May-1983
0000 75 : Added new transfer, renamed old ones.
0000 76 :
0000 77 :--
0000 78 :
0000 79 :
0000 80 : DECLARATIONS
0000 81 :
0000 82 : \$PRTSMBDEF
0000 83 :

```
00000000 85 .PSECT $SMBSHR_TRANSFER, NOWRT, NOEXE, SHR, NOPIC, NOVEC
00000000 86
00000000 87 : Define macro to set up transfer vectors
00000000 88
00000000 89
00000000 90
00000000 91 .MACRO transfer entry_point
00000000 92 .TRANSFER entry_point
00000000 93 .MASK entry_point
00000000 94 JMP entry_point+2 ;Entry point mask
00000000 95 .ENDM transfer ;Go to main routine code
00000000 96
00000000 97 :
00000000 98 : NOTE: These transfer vectors cannot change. Add new vectors at the
00000000 99 : end -- replace obsolete vectors with dummy entries.
00000000 100 :
00000000 101
00000000 102 SMBSHR_TRANSFER:
00000000 103 transfer SMB$CHECK_FOR_MESSAGE ; Check for a job controller message
00080000 104 transfer PSMS$REPORT ; Complete asynchronous service
00100000 105 transfer PSMS$FILE_FLAG ; File flag/burst page
00180000 106 transfer PSMS$FILE_TRAILER ; File trailer page
00200000 107 transfer SMBS$READ_MESSAGE_ITEM ; Get next item from message
00280000 108 transfer PSMS$INCLUDE_MODULES ; Include library modules
00300000 109 transfer SMBS$INITIALIZE ; Initialize symbiont
00380000 110 transfer PSMS$JOB_FLAG ; Job flag/burst page
00400000 111 transfer PSMS$JOB_TRAILER ; Job trailer page
00480000 112 transfer PSMS$PAGE_HEADER ; Page header routine
00500000 113 transfer PSMS$PAGE_SETUP ; Page setup routine
00580000 114 transfer PSMS$PRINT ; Standard print symbiont
00600000 115 transfer PSMS$REPLACE ; Provide a user service routine
00680000 116 transfer PSMS$READ_ITEM_DX ; Read an SCB item by descriptor
00700000 117 transfer PSMS$READ_ITEM_R ; Read an SCB item by reference
00780000 118 transfer SMBS$READ_MESSAGE ; Read a job controller message
00800000 119 transfer SMBS$SEND_TO_JOBCTL ; Send a job controller message
00880000 120 transfer PSMS$WRITE_ITEM_DX ; Write an SCB item by descriptor
00900000 121 transfer PSMS$WRITE_ITEM_R ; Write an SCB item by reference
00980000 122
```

00000000 124 .PSECT CODE LONG,NOWRT
0000 125
0000 126
0000 127 : Hangup dispatch table
0000 128 :
0000 129
0000 130 PSM\$HANGUP_DISPATCH_TABLE::
0000 131 index = 0
0000 132 .repeat PSM\$K_MAXSTREAMS ;One entry for each stream
0000 133
0000 134 .WORD 0
0000 135 MOVZBL #index,R0
0000 136 BRW DISPATCH
0000 137
0000 138 index = index + 1 ;Advance macro index
0000 139 .endr
0100 140
0100 141 :
0100 142 : Globally declare dispatch entry size
0100 143
0000 144 PSM\$S_HANGUP_DISPATCH_ENTRY == -
0100 < - PSM\$HANGUP_DISPATCH_TABLE> / PSM\$K_MAXSTREAMS
0100 146
0100 147
0100 148 :
0100 149 : Mark the stream as hungup
0100 150 :
0100 151 :
0100 152 DISPATCH:
50 00000000'EF40 D0 0100 153 MOVL PSM\$GL_SCBVEC[R0],R0 : SCB address
00 0C A0 02 E2 0108 154 BBSS #PSM\$V_HANGUP,_
010D 155 PSM\$L_STREAM_FLAGS(R0),10\$: Set the HANGUP flag
04 010D 156 10\$: RET
010E 157
010E 158 .END

TRANSFER
Symbol table

F 2 Transfer vectors for Symiont Services Ro 16-SEP-1984 02:08:53 VAX/VMS Macro V04-00
 5-SEP-1984 02:42:09 [PRTSMB.SRC]TRANSFER.MAR;1 Page 5 (3)

| | | | |
|-----------------------------|------------|----|----|
| DISPATCH | 00000100 | R | 03 |
| INDEX | = 00000020 | | |
| PSMSFILE_FLAG | ***** | X | 02 |
| PSMSFILE_TRAILER | ***** | X | 02 |
| PSMSGL_SCBVEC | ***** | X | 03 |
| PSMSHANGUP_DISPATCH_TABLE | 00000000 | RG | 03 |
| PSMSINCLUDE_MODULES | ***** | X | 02 |
| PSMSJOB_FLAG | ***** | X | 02 |
| PSMSJOB_TRAILER | ***** | X | 02 |
| PSMSK_MAXSTREAMS | = 00000020 | | |
| PSMSL_STREAM_FLAGS | = 0000000C | | |
| PSMSPAGE_HEADER | ***** | X | 02 |
| PSMSPAGE_SETUP | ***** | X | 02 |
| PSMSPRINT | ***** | X | 02 |
| PSMSREAD_ITEM_DX | ***** | X | 02 |
| PSMSREAD_ITEM_R | ***** | X | 02 |
| PSMSREPLACE | ***** | X | 02 |
| PSMSREPORT | ***** | X | 02 |
| PSMSS_HANGUP_DISPATCH_ENTRY | = 00000008 | G | |
| PSMSV_HANGUP | = 00000002 | | |
| PSMSWRITE_ITEM_DX | ***** | X | 02 |
| PSMSWRITE_ITEM_R | ***** | X | 02 |
| SMB\$CHECK_FOR_MESSAGE | ***** | X | 02 |
| SMB\$INITIALIZE | ***** | X | 02 |
| SMB\$READ_MESSAGE | ***** | X | 02 |
| SMB\$READ_MESSAGE_ITEM | ***** | X | 02 |
| SMB\$SEND_TO_JOBCTL | ***** | X | 02 |
| SMBSHR_TRANSFER | 00000000 | R | 02 |

+-----+
! Psect synopsis !
+-----+

PSECT name

| PSECT name | Allocation | PSECT No. | Attributes |
|-------------------|------------|------------------|---|
| . ABS . | 00000000 | (0.) 00 (0.) | NOPIC LSR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE |
| \$ABSS | 00000000 | (0.) 01 (1.) | NOPIC USR CON ABS LCL NOSHR EXE RD WRT NOVEC BYTE |
| \$SMBSHR_TRANSFER | 00000098 | (152.) 02 (2.) | NOPIC USR CON REL LCL SHR NOEXE RD NOWRT NOVEC BYTE |
| CODE | 0000010E | (270.) 03 (3.) | NOPIC USR CON REL LCL NOSHR EXE RD NOWRT NOVEC LONG |

+-----+
! Performance indicators !
+-----+

Phase

| Phase | Page faults | CPU Time | Elapsed Time |
|------------------------|-------------|-------------|--------------|
| Initialization | 9 | 00:00:00.06 | 00:00:01.27 |
| Command processing | 85 | 00:00:00.60 | 00:00:04.01 |
| Pass 1 | 165 | 00:00:03.91 | 00:00:12.16 |
| Symbol table sort | 0 | 00:00:00.50 | 00:00:00.89 |
| Pass 2 | 50 | 00:00:00.83 | 00:00:05.48 |
| Symbol table output | 4 | 00:00:00.04 | 00:00:00.15 |
| Psect synopsis output | 1 | 00:00:00.02 | 00:00:00.02 |
| Cross-reference output | 0 | 00:00:00.00 | 00:00:00.00 |
| Assembler run totals | 314 | 00:00:05.96 | 00:00:25.99 |

The working set limit was 900 pages.

TRANSFER
VAX-11 Macro Run Statistics

G 2
Transfer vectors for Symiont Services Ro 16-SEP-1984 02:08:53 VAX/VMS Macro V04-00
5-SEP-1984 02:42:09 [PRTSMB.SRC]TRANSFER.MAR;1 Page 6
(3)

22141 bytes (44 pages) of virtual memory were used to buffer the intermediate code.
There were 30 pages of symbol table space allocated to hold 350 non-local and 1 local symbols.
158 source lines were read in Pass 1, producing 17 object records in Pass 2.
9 pages of virtual memory were used to define 8 macros.

! Macro library statistics !

Macro library name

\$255\$DUA28:[PRTSMB.OBJ]SMBDEF.MLB;1
\$255\$DUA28:[SYSLIB]STARLET.MLB;2
TOTALS (all libraries)

Macros defined

1
3
4

384 GETS were required to define 4 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LI\$:TRANSFER/OBJ=OBJ\$:TRANSFER MSRC\$:TRANSFER/UPDATE=(ENH\$:TRANSFER)+LIB\$:SMBDEF/LIB

0312 AH-BT13A-SE
VAX/VMS V4.0

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LIS

REM

REMMACROS
MAR

REMACP
MAP

REMEXPORTD
LIS STOPREM
LIS

DAPDEF
MDL

REMACPDAT
LIS

REMPROTCL
LIS

REMSUBR
LIS

TRANSFER
LIS

STOPREM
MAP